UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HICKMAN PALERMO TRUONG & BECKER, LLP
2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110

EXAMINER
ZIA, SYED

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/435,015	JIAO, FAN
	Examiner	Art Unit	
	Syed Zia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114.

Original application contained Claims 1-20. Applicant previously added new claims Claim 21-

26. Therefore, Claims 1-26 are pending for further consideration.

Applicant's submission filed on November 26, 2004 has been entered and made of record..

Response to Arguments

3.   Applicant's arguments with respect to claims 1-26 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-5, 7-10, and 15-17, and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Garcia, Jr. et al. U.S. Patent No. 6,470,357 ('Garcia' hereinafter).

6.   With respect to claim 1, Garcia teach a directory-enabled network element (see abstract, Fig. 4, Item 400, and 404).

7.   Claim 2 rejected as above rejecting claim 1, furthermore Garcia teach a directory-enabled network comprising: a directory enabling element installed in an executed by the network element, and configured to query, access, and update directory information that is managed by a directory service of a network that includes the network element (col. 5, lines 20-29).

8.   Claim 3 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-enabled network comprising:

        a directory enabling element installed in and executed by the network element, and configured to query, access, and update directory information that is managed by a directory service of a network that includes the network element (col. 5, lines 20-29)

an application programming interface coupled to the directory enabling element and
configured to receive directory services requests from application programs and provide the
directory services requests to the directory enabling element (col. 5, lines 30-41).

9.   Claim 4 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-
enabled network comprising:

a directory enabling element installed in and executed by the network element, and
configured to query, access, and update directory information that is managed by a directory
service of a network that includes the network element (col. 5, lines 20-29);

an application programming interface coupled to the directory enabling element and
configured to receive directory services requests from application programs and provide the
directory services requests to the directory enabling element (col. 5, lines 30-41).

a locator service coupled to the directory enabling element and accessible using the
application programming interface and configured to locate servers that provide the directory
services in the network (col. 7, lines 5-10).

10.   Claim 5 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-
enabled network comprising:
a directory enabling element installed in and executed by the network element, and configured to
query, access, and update directory information that is managed by a directory service of a
network that includes the network element (col. 5, lines 20-29);

a bind service in the directory enabling element and coupled to a security protocol and

configured to bind an external application program to the security protocol [i.e. CMIP] (col.2

line 43 to line 47, col.3line 11 to line 30, and col.3 line 55 to line 57).

11.   Claim 7 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-

enabled network comprising:

a directory enabling element installed in and executed by the network element, and

configured to query, access, and update directory information that is managed by a directory

service of a network that includes the network element col. 5, lines 20-29);

a locator service coupled to the directory enabling element and configured to locate

servers that provide the directory services in the network (col. 7, lines 5-10);

an event service coupled to the directory enabling element and configured to receive

registration of an event and an associated responsive action from an application program, notify

the application program when the event occurs, and execute the associated responsive action in

response thereto (col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60).

12.   Claim 8 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-

enabled network comprising:

a directory enabling element installed in and executed by the network element, and

configured to query, access, and update directory information that is managed by a directory

service of a network that includes the network element (col. 5, lines 20-29);

an application programming interface coupled to the directory enabling element and

configured to receive directory services requests from application programs and provide the

directory services requests to the directory enabling element (col. 5, lines 30-41).

a locator service coupled to the directory enabling element and configured to locate

servers that provide the directory services in the network (col. 7, lines 5-10);

an event service coupled to the directory enabling element and configured to receive

registration of an event and an associated responsive action from an application program, notify

the application program when the event occurs, and execute the associated responsive action in

response thereto (col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60).

13.   Claim 9 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-

enabled network comprising:

a directory enabling element installed in and executed by the network element, and

configured to query, access, and update directory information that is managed by a directory

service of a network that includes the network element (col. 5, lines 20-29);

a locator service coupled to the directory enabling element and configured to locate

servers that provide the directory services in the network (col. 7, lines 5-10);

a group policy interface coupled to the directory enabling element and configured to

receive and update the directory service with one or more definitions of directory services

policies that apply to groups of network devices in the network (col. 5, lines 20-45).

14.   Claim 10 rejected as above in rejecting claim 1, furthermore Garcia teach a directory-enabled network comprising:

        a directory enabling element installed in and executed by the network element, and configured to query, access, and update directory information that is managed by a directory service of a network that includes the network element (col. 5, lines 20-29);

        a bind service in the directory enabling element and coupled to a security protocol and configured to bind an external application program to the security protocol (col.2 line 43 to line 47, col.3 line 11 to line 30, and col.3 line 55 to line 57)

        an event service coupled to the directory enabling element and accessible using the application programming interface and configured to receive registration of an event and an associated responsive action from an application program, notify the application program when the event occurs, and execute the associated responsive action in response thereto (col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60).

15.   With respect to claim 15, Garcia teach a method of using a directory-enabled network element to query, access, or update directory information of a directory service of a network that includes the directory-enabled network element (abstract, Fig. 4, Item 400, and 404), wherein the directory-enabled network element comprises a directory enabling element installed in and executed by the network element, and configured to query, access, and update directory information that is managed by a directory service of a network that includes the network element (col. 5, lines 20-29); the method comprising the steps of:

binding the application program to the security protocol [i.e. CMIP] (col.2 line 43 to line

47, col.3 line 11 to line 30, and col.3 line 55 to line 57);

creating an event and an associated responsive action that are associated with the

application program (col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60);

in response to occurrence of the event, executing the responsive action, obtaining policy

information from the directory service, and converting the policy information into one or more

commands that are executable by the directory-enabled network element (col. 5, lines 20-45, and

col.7 line 50 to line 57).

16.   With respect to claim 16, Garcia teach a computer-readable medium carrying one or more

sequences of instructions for using (col.7 line 50 to line 57) a directory-enabled network element

to query, access, or update directory information of a directory service of a network that includes

the directory-enabled network element (col. 5, lines 20-29), wherein execution of the one or

more sequences of instructions by one or more processors causes the one or more processors to

perform the steps of (Fig. 4, Item 400, and col.7 line 50 to line 57):

creating and storing a directory enabling element installed in and executed by the

network element, and configured to query, access, and update directory information that is

managed by a directory service of a network that includes the network element (col.6line 20 to

line 27, and col. 5, lines 20-29).

binding the application program to the security protocol (col.2 line 43 to line 47, col.3

line 11 to line 30, and col.3 line 55 to line 57);

creating an event and an associated responsive action that are associated with the

application program (col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60);

in response to occurrence of the event, executing the responsive action, obtaining policy

information from the directory service, and converting the policy information into one or more

commands that are executable by the directory enabled network element (col. 5, lines 20-45, and

col.7 line 50 to line 57).

17.   Claim 17 rejected as above in rejecting claim 16, further performing the steps of:

locating a nearest directory server and binding the application program to the nearest

directory server that is located, and locating a nearest event server and binding the application

program to the nearest event server that is located (col.5 line 14 to line 20).

18.   Claim 20 rejected as above in rejecting claim 16, further wherein execution of the one or

more sequences of instructions by one or more processors causes the one or more processors to

perform the further steps of (col.3 line 41 to line 45) establishing an application programming

interface coupled to the directory enabling element and configured to receive directory services

requests from application programs and provide the directory services requests to the one or

more processors (col.5 line 30 to line 41).

19.   With respect to claim 21, Garcia teach a directory services-enabled network element (see

abstract, Fig. 4, Item 400, and 404)

20.   With respect to claim 22, Garcia teach a system comprising a network element enabled to automatically interface with directory services (col. 7, lines 1-10)

21.   Claim 23 rejected as above in rejecting claim 22, wherein the network element obtains policy information form the directory services and updates the directory service (col. 5, lines 03-25)

22.   Claim 24 rejected as above in rejecting claim 22, wherein the network element includes a protocol agent for interfacing with directory services (see col. 1, line 49 to line 53, and col.1 line 35 to line 42).

Claim Rejections - 35 USC § 103

23.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

24.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. U.S. Patent No. 6,33,560 ('Garcia' hereinafter) in view of Day, II et al. U.S. Patent No. 5,968,116 ('Day, II' hereinafter).

25.   Garcia teach claim 6 rejected as above in rejecting claim 2.

Garcia does not explicitly disclose a Unicode translation service configured to query, access, and update directory information that is encoded in a Unicode international character format.

Day, II teach a Unicode translation service configured to query, access, and update directory information that is encoded in a Unicode international character format (see col. 6, lines 13-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Day, II within the system of Garcia because both references are directed to a directory-enabled network element, and because the implementation of the Unicode translation service of Day, II in Bernhard would allow for the data within the directory to be effectively transported through the network without corruption, further improving the reliability of the directory information that is encoded in a Unicode international character format.

26.   Claims 11-14 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. U.S. Patent No. 6,33,560 ('Garcia' hereinafter) in view of Baum et al. U.S. Patent No. 6,400,707 ('Baum' hereinafter).

27.   With respect to claim 11, Garcia teach a directory-enabled packet router (col. 3, lines 11-30).

Garcia does not explicitly disclose a packet-switched network.

Baum disclose a packet-switched network (see col. 3, lines 48-64)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baum within the system of Garcia because both references are directed to a directory-enabled network and the combination of both references would enable packets sent from the directory to be divided into packets before they are sent, and once all the packets forming the message arrive at the destination to recompile into the original message, further withstanding delays in transmission and increasing the efficiency in which the packets of data are received at the destination.

28.   Claim 12 rejected as above in rejecting claim 11, further comprising:

a directory enabling element installed in and executed by the router, and configured to query, access, and update directory information that is managed by a directory service of a network that include the router (Garcia: col.3 line 11 to line 22, and col. 5, lines 20-29);

a bind service in the directory enabling element and coupled to a security protocol and configured to bind an application program to the security protocol (Garcia: col.2 line 43 to line 47, col.3 line 11 to line 30, and col.3 line 55 to line 57);

an event service coupled to the directory enabling element and accessible using the application programming interface and configured to receive registration of an event and an associated responsive action from an application program, notify the application program when the even occurs, and execute the associated responsive action in response thereto (Garcia: col.4 line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60).

29.   With respect to claim 13, Garcia teach a directory-enabled network data switch (col. 3,

lines 11-30).

Garcia do not explicitly disclose a packet-switched network.

Baum disclose a packet-switched network (see col. 3, lines 48-64)

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Baum within the system of Garcia because both

references are directed to a directory-enabled network and the combination of both references

would enable packets sent from the directory to be divided into packets before they are sent , and

once all the packets forming the message arrive at the destination to recompile into the original

message, further withstanding delays in transmission and increasing the efficiency in which the

packets of data are received at the destination.

30.   With respect to claim 14 rejected as above in rejecting claim 13, further comprising:

a directory enabling element installed in and executed by the switch, and configured to

query, access, and update directory information that is managed by a directory service of a

network that includes the switch (Garcia: col.3 line 11 to line 22, and col. 5, lines 20-29);

a bind service in the directory enabling element and coupled to a security protocol and

configured to bind an application program to the security protocol [i.e. CMIP] (Garcia:col.2 line

43 to line 47, col.3line 11 to line 30, and col.3 line 55 to line 57);

an event service coupled to the directory enabling element and accessible using the

application programming interface and configured to receive registration of an event and an

associated responsive action from an application program, notify the application program when

the event occurs, and execute the associated responsive action in response thereto (Garcia: col.4

line 25 to line 38, col.6 line 20-27, and col.6 line 56 to line 60).

31.   With respect to claim 25, Garcia teach a directory-enabled packet router (Garcia: col. 3,

lines 11-30).

Garcia does not explicitly disclose a packet-switched network.

Baum disclose a packet-switched network (see col. 3, lines 48-64)

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Baum within the system of Garcia because both

references are directed to a directory-enabled network and the combination of both references

would enable packets sent from the directory to be divided into packets before they are sent, and

once all the packets forming the message arrive at the destination to recompile into the original

message, further withstanding delays in transmission and increasing the efficiency in which the

packets of data are received at the destination.

32.   With respect to claim 26, Garcia teach a directory-enabled network data switch (col. 3,

lines 11-30).

Garcia does not explicitly disclose a packet-switched network.

Baum disclose a packet-switched network (col. 3, lines 48-64)

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Baum within the system of Garcia because both

references are directed to a directory-enabled network and the combination of both references

would enable packets sent from the directory to be divided into packets before they are sent , and

once all the packets forming the message arrive at the destination to recompile into the original

message, further withstanding delays in transmission and increasing the efficiency in which the

packets of data are received at the destination.

33.   Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al.

U.S. Patent No. 6,33,560 ('Harrison' hereinafter) in view of Nessett et al. U.S. Patent No.

5,968,176 ('Nessett' hereinafter).

34.   Garcia teach claim 18 rejected as above in rejecting claim 16.

        Garcia does not explicitly disclose a virtual private network is created between the router

and another network device.

        Nessett teach translating the policy information into one or more values that are ready to

apply to a router, whereby a virtual private network is created between the router and another

network device (col. 14, lines 31-47; col. 15, lines 6-67).

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Nessett within the system of Bernhard to arrive at the

invention as claimed because both references are directed to a computer-readable medium, and

because the implementation of virtual private network would increase the level of protection of

the packets that are moved between the source and destination, further preserving the integrity of

the data within the directory-enabled network element.

35.   Garcia teach claim 19 rejected as above in rejecting claim 16.

Garcia does not explicitly disclose a set of internal data structures of a router and a

dynamic IPSEC configuration.

Nessett teach translating the policy information into one or more values that are ready to

apply to a set of internal data structures of a router, by calling one or more internal NOS API

functions, whereby a dynamic IPSEC configuration is created that connects the router and at

least one other network device (col. 10, lines 24-59; col. 13, lines 51-67 to col. 14, lines 19-30).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Nessett within the system of Bernhard to arrive at the

invention as claimed because both references are directed to a computer-readable medium, and

because the implementation of IPSEC configuration would increase the level of protection of the

communication that occurs between the router and one other network device, effectively

ensuring the secure packet exchanges at the IP layer, and further improving the security of the

communication interface of the combined system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 18, 2004